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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,050	03/05/2002	Travis J. Parry	10008068-1	1359

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

HUNTSINGER, PETER K

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/092,050

Applicant(s)

PARRY, TRAVIS J.

Examiner

Peter K. Huntsinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1- 20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The added limitation of claims 1 and 16 includes determining options, said available options include consumable options for said at least one printing device. The specification provides no support for determining and selecting a consumable option.

Claim Rejections - 35 USC § 103

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4. Claims 1-9, 11, 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igval Patent 6,045,206 and further in view of Nguyen et al. Patent 6,825,941.

Referring to claim 1, Igval discloses a method for improving use of printing devices in a network computer system, comprising: determining usage characteristics of at least one printing device (col. 6, lines 28-44); determining all options available for said at least one printing device, said available options including servicing options for said at least one printing device (col. 5-6, lines 66-67, 1-12); determining all installed options currently existing on said at least one printing device, said installed options including servicing options of said at least one printing device (col. 8, lines 6-11); and determining a set of optimal options for said at least one printing device based on said usage characteristics, said available options and said installed options (col. 6, lines 45-55). Igval does not disclose expressly options including paper handling, consumable, print processing, configuration, software, and hardware options. Nguyen et al. disclose determining all options available for said at least one printing device, said available options including paper handling (Output Bin/Tray Assignment of Fig. 8), consumable, print processing (Dithering of Fig. 8), configuration (Any selected parameter that determines the operating characteristic of the printer as shown in Fig. 8), software (TrueType Font of Fig. 8), and hardware options (Any options that effect the printer, i.e. the printer is hardware) for said at least one printing device; and determining all installed options currently existing on said at least one printing device, said installed options including paper handling, consumable, print processing, configuration, software, and

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hardware options of said at least one printing device (installed options appear as the user selects the dropdown box shown in Fig. 8). At the time of the invention, it would have obvious to a person of ordinary skill in the art to optimize a printer based on paper handling, consumable, print processing, configuration, software, and hardware options available. The motivation for doing so would have been to allow the user to customize the printer settings to the user's desire. Therefore, it would have been obvious to combine Nguyen et al. with Igval to obtain the invention as specified in claim 1.

Referring to claim 2, Igval discloses suggesting at least one change to said at least one printing device for optimizing the use of said at least one printing device with said network computer system (col. 6, lines 45-55).

Referring to claim 3, Igval discloses wherein said suggesting at least one change to said at least one printing device for optimizing the use of said at least one printing device with said network computer system comprises suggesting an option selected from the group consisting of using a toner miser function, turning on a job retention memory, and suggesting other printing device configurations (col. 6, lines 45-55).

Referring to claim 4, Igval discloses wherein said determining the usage characteristics of at least one printing device comprises determining the usage characteristics of all printing devices operating on said network computer system (col. 7, lines 50-58).

Referring to claim 5, Igval discloses wherein said determining the usage characteristics of at least one printing device comprises retrieving said usage characteristics from a database (col. 6, lines 28-44).

Referring to claim 6, Igval discloses wherein said determining the usage characteristics of at least one printing device comprises retrieving said usage characteristics from a database (col. 6, lines 28-44).

Referring to claim 7, Igval discloses wherein said determining the usage characteristics of at least one printing device comprises determining at least one usage characteristic selected from the group consisting of paper use rate, toner use rate, power use rate, time of print job request, consumable use per job rate, and print job request rate (col. 6, lines 28-44).

Referring to claim 8, Igval discloses wherein said determining all options available for each of said at least one printing device comprises retrieving available said available options from a database (col. 5-6, lines 66-67, 1-12).

Referring to claim 9, Igval discloses wherein said determining all options available for said at least one printing device comprises querying said at least one printing device to retrieve said available options (col. 5-6, lines 66-67, 1-12).

Referring to claim 11, Igval discloses wherein said determining all installed options currently existing on said at least one printing device comprises retrieving said installed options from a database (col. 5-6, lines 66-67, 1-12).

Referring to claim 12, Igval discloses wherein said determining all installed options currently existing on said at least one printing device comprises querying said at least one printing device to retrieve said installed options (col. 8, lines 6-11).

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Referring to claim 14, Igval discloses suggesting at least one service to incorporate with said at least one printing device for providing enhanced usage of said at least one printing device (col. 6, lines 45-55).

Referring to claim 15, Igval discloses wherein said suggesting at least one service to incorporate with said at least one printing device comprises suggesting at least one service selected from the group consisting of a maintenance service, a charge per page service, and a printing device monitoring service (col. 6, lines 45-55).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Igval Patent 6,045,206 and Nguyen et al. Patent 6,825,941, and further in view of well known prior art.

Referring to claim 10, Igval discloses a querying a datacenter for said available options, but does not disclose expressly querying a website for available options. Official Notice is taken that it would have been well known and obvious in the art to provide the datacenter as a server and provide the options through a website hosted by the server (See MPEP 2144.03). The motivation for doing so would have been to provide the datacenter at a remote location separate from the printer. Therefore, it would have been obvious to combine well known prior art with Igval and Nguyen et al. to obtain the invention as specified in claim 10.

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6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Igval Patent 6,045,206 and Nguyen et al. Patent 6,825,941 as applied to claim 1, and further in view of Hopkins Patent 5,390,004.

Referring to claim 13, Igval discloses determining a set of optimal options for said at least one printing device based on said usage characteristics, said available options and said installed options, but does not disclose expressly utilizing fuzzy logic to determine said options. Hopkins discloses using fuzzy logic to determine a way to optimize a printing device (col. 1, lines 11-17). Igval and Hopkins are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize fuzzy logic to optimize a printer. The motivation for doing so would have been to utilize a system of reasoning that can cope with uncertain or partial information. Therefore, it would have been obvious to combine Hopkins with Igval and Nguyen et al. to obtain the invention as specified in claim 13.

7. Claims 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igval Patent 6,045,206, and further in view of Overall et al. Patent 5,797,061 and Nguyen et al. Patent 6,825,941.

Referring to claim 16, Igval discloses a method for suggesting printing device options in a network computer system, comprising: determining the usage characteristics of at least one printing device (col. 6, lines 28-44); operating a computer program on a computer (col. 6, lines 48-65); using said computer program to determine

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all options available for said at least one printing device (col. 5-6, lines 66-67, 1-12); using said computer program to determine all installed options currently existing on said at least one printing device (col. 8, lines 6-11); and using said computer program to determine a set of optimal options for said at least one printing device based on said usage characteristics, said available options and said installed options (col. 6, lines 45-55). Igval does not disclose expressly determining the usage characteristics and suggesting options with a program run on a computer. Overall et al. disclose determining the usage characteristics of a printing device with a device management program (col. 16-17, lines 54-67, 1-7). Igval, and Overall et al. are combinable because they are from the same field of measuring usage in printing systems. At the time of the invention, it would have been obvious to one of ordinary skill in the art to measure printer usage and determine options using a computer. The motivation for doing so would have been to benefit from the greater processing ability that a computer has over a printer. Igval does not disclose expressly options including paper handling, consumable, print processing, configuration, software, and hardware options. Nguyen et al. disclose using a computer program to determine all options available for said at least one printing device, said available options including paper handling (Output Bin/Tray Assignment of Fig. 8), consumable, print processing (Dithering of Fig. 8), configuration (Any selected parameter that determines the operating characteristic of the printer as shown in Fig. 8), software (TrueType Font of Fig. 8), and hardware options (Any options that effect the printer, i.e. the printer is hardware) for said at least one printing device; and using said computer program to determine all installed options

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currently existing on said at least one printing device, said installed options including paper handling, consumable, print processing, configuration, software, and hardware options of said at least one printing device (installed options appear as the user selects the dropdown box shown in Fig. 8). At the time of the invention, it would have obvious to a person of ordinary skill in the art to optimize a printer based on paper handling, consumable, print processing, configuration, software, and hardware options available. The motivation for doing so would have been to allow the user to customize the printer settings to the user's desire. Therefore, it would have been obvious to combine Overall et al. and Nguyen et al. with Igval to obtain the invention as specified in claim 16.

Referring to claim 18, Igval discloses wherein said computer program is configured to communication with said device management program (col. 6, lines 48-65). The data center of Igval selects an algorithm based on the usage characteristics of the printing device. Overall et al. teach measuring the usage characteristics of the printing device (col. 16-17, lines 54-67, 1-7). Thus, the modified system requires the data center 50 to receive usage characteristics of the management program.

Referring to claim 20, Igval discloses wherein using said computer program to determine an optimal set of options for said at least one printing device comprises using said computer program to compare said installed options with said available options (col. 6, lines 45-55).

8. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igval Patent 6,045,206, Overall et al. Patent 5,797,061 and Nguyen et al. Patent 6,825,941 as applied to claim 16, and further in view of well known prior art.

Referring to claim 17, Igval discloses a querying a datacenter for said available options, but does not disclose expressly querying a website for available options. Official Notice is taken that it would have been well known and obvious in the art to provide the datacenter as a server and provide information through a website hosted by the server (See MPEP 2144.03). The motivation for doing so would have been to provide the datacenter at a remote location separate from the printer. Therefore, it would have been obvious to combine well known prior art with Igval, Overall et al., and Nguyen et al. to obtain the invention as specified in claim 17.

Referring to claim 19, Igval disclose the computer program (col. 6, lines 48-65). Overall et al. disclose the device management program (col. 16-17, lines 54-67, 1-7). Official Notice is taken that it would have been well known and obvious to combine the programs into one program (See MPEP 2144.03). The motivation for doing so would have been to provide the combined capability to measure usage characteristics and base suggested options off those characteristics. Furthermore, it is common for software to combine related functions into one program (for example, Windows, Office, Photoshop, etc.). Therefore, it would have been obvious to combine well known prior art with Igval, Overall et al., and Nguyen et al. to obtain the invention as specified in claim 19.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

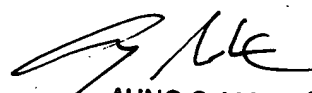
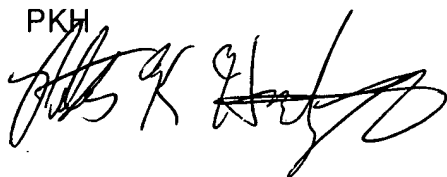
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter K. Huntsinger whose telephone number is (571)272-7435. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moe Aung can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PKH



AUNG S. MOE 2/14/07
SUPERVISORY PATENT EXAMINER